

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,304	08/06/2001	Yutaka Yamagata	107734	5220

25944 7590 03/31/2005
OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

GORDON, BRIAN R

ART UNIT PAPER NUMBER

1743

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/674,304	YAMAGATA ET AL.	
	Examiner	Art Unit	
	Brian R. Gordon	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10-31-00 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see remarks, filed February 10, 2005, with respect to the rejection(s) of claim(s) 1-18 under 112 first and second paragraph, 102, and 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Moore et al. US 5,866,825.

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. However, a final office action appears to be appropriate in view of the response filed.

Drawings

3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because reference numeral 15 designates both "flow path" and "discharge vessel" on page 8. Correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 7, 8, and 10 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 7 and 8 recites the limitation "the bottom surface" in line 2. There is insufficient antecedent basis for this limitation in the claims.

8. The term "almost" in claim 10 is a relative term which renders the claim indefinite. The term "almost" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. What is considered almost? Applicant has not provided a specified value as to determine what one considers almost.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

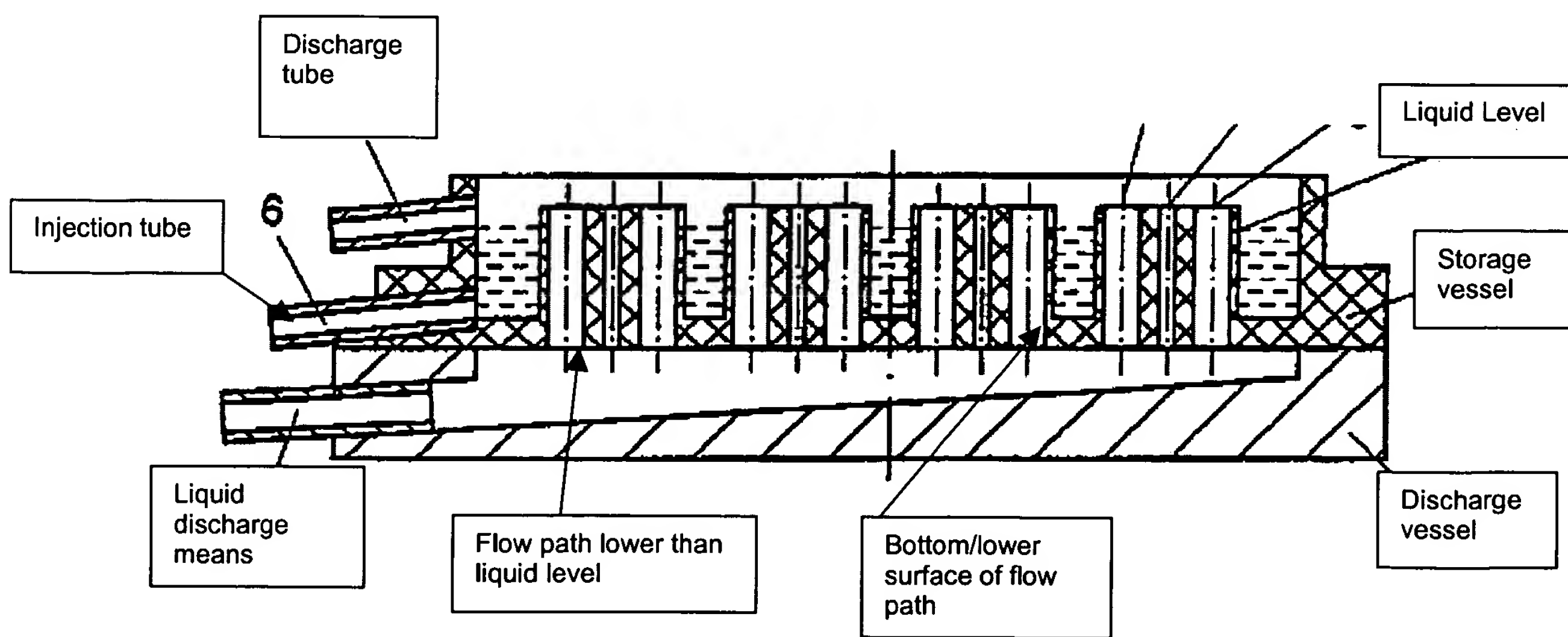
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-2, 5-10, 12, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Moore et al. US 5,866,825.

Moore et al. discloses a rinsing tray system for cleaning the pipette tips of a multipipetting device is described. The rinsing tray system substantially comprises a first tray and a second tray below the latter, these two trays communicating via openings which are arranged in the same grid dimension as the pipette tips of a multipipetting device (abstract).

The vent openings 8 ensure that the air located in the second tray 2 can escape so that there can be an undisturbed flow into the second tray 2. The vent openings 8 in the webs 4 can also be dispensed with. However, in that case, suction (discharging means) must be provided for via the outlet 5 so that the air located in the second tray 2 does not have a hindering effect.

The following figure has been labeled with applicant terms as to show what the elements of the reference are considered equivalent to those claimed by applicant.



Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 3-4, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al. US 5,866,825.

As to claim 3, it can be seen in the Figure above, that while not specifically stated, the total surface area of the bottom tray appears to be much larger than that of the top tray which has numerous openings therethrough, reducing the surface area.

As to claim 4, the discharge vessel of the device as labeled above takes on the form of a denary.

As to claim 11, one may select the grid array of tubes to placed in any position, as such it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the grid of tubes to be any arrangement including on which would place one of the tubes on the central axis of the device.

15. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al. as applied to claim 12 above, and further in view of Kano et al., US 4,466,740.

Moore et al. does not disclose the device is made of acrylic material.

Kano et al. discloses a multiwell plate formed by molding of chemically resistive acrylic resins.

It would have been obvious to one of ordinary skill in the art at the time of the invention to manufacture the device of Moore et al. from an acrylic material as taught by Kano et al. in order to produce a chemical resistant rinsing tray.

16. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al. as applied to claim 1 above, and further in view of Copeland et al. US 5,137,694.

Moore et al. does not disclose the device liquid and discharge means comprise pumps.

Copeland discloses a dispensing and cleansing system that employs pumps for transporting liquid into and out of a container.

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ pumps within the device of Moore et al. as taught by Copeland to supply liquid to the tray and suck the liquid out for pumps are conventional in the art of fluid transfer.

17. Claims 15 -18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore et al. as applied to claim 1 above, and further in view of Rose et al. US 6,551,557.

Moore et al. does not disclose the device liquid and discharge means comprise pumps.

Rose discloses a liquid supply/dispensing system comprising a pump. The pump 22 is preferably a high-resolution, positive displacement syringe pump hydraulically coupled to the dispenser 12. Alternatively, pump 22 may be any one of several varieties of commercially available pumping devices for metering precise quantities of liquid. A syringe-type pump 22, as shown in FIG. 7, is preferred because of its convenience and commercial availability. A wide variety of other direct current fluid source means may be used, however, to achieve the benefits and advantages as disclosed herein. These may include, without limitation, rotary pumps, peristaltic pumps, squash-plate pumps, and the like, or an electronically regulated fluid current source. As the lead screw portion 68 of the plunger shaft 66 is rotated the plunger 64 will be displaced axially, forcing system fluid from the syringe housing 62 into the exit tube 70. Any number of suitable motors or

mechanical actuators may be used to drive the lead screw 68. Preferably, a stepper motor 26 (FIG. 7) or other incremental or continuous actuator device is used so that the amount and/or flow rate of fluid or reagent can be precisely regulated.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a syringe-type pump assembly as taught by Rose et al. for the assemblies are readily available and provide for precise regulation to the fluid flow.

Allowable Subject Matter

18. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

19. The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach nor fairly suggest the surfaces of the storage vessel, the flow path and the discharge vessel are hydrophilic treated in the integrally formed material.

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Feygin; Ilya; Zimmermann; Peter et al.; Krippel; Kurt et al.; Aoyagi; Keichi; Endo; Isao et al.; Trethewe, William C.; Preisser, Mark et al.; Peterson, Michael Leroy; Osaki; Hiroshi et al.; Benjey; Robert P.; Bergsma; Rudolph et al.; Benjey; Robert P. et al.; Bennett; Willard M.; Sharp; Bruce R.; Yamaguchi; Shogo et al.; and Mylander; Gerald D. disclose fluid transfer devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian R. Gordon whose telephone number is 571-272-1258. The examiner can normally be reached on M-F, with 2nd and 4th F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

brg


Jill Warden
Supervisory Patent Examiner
Technology Center 1700